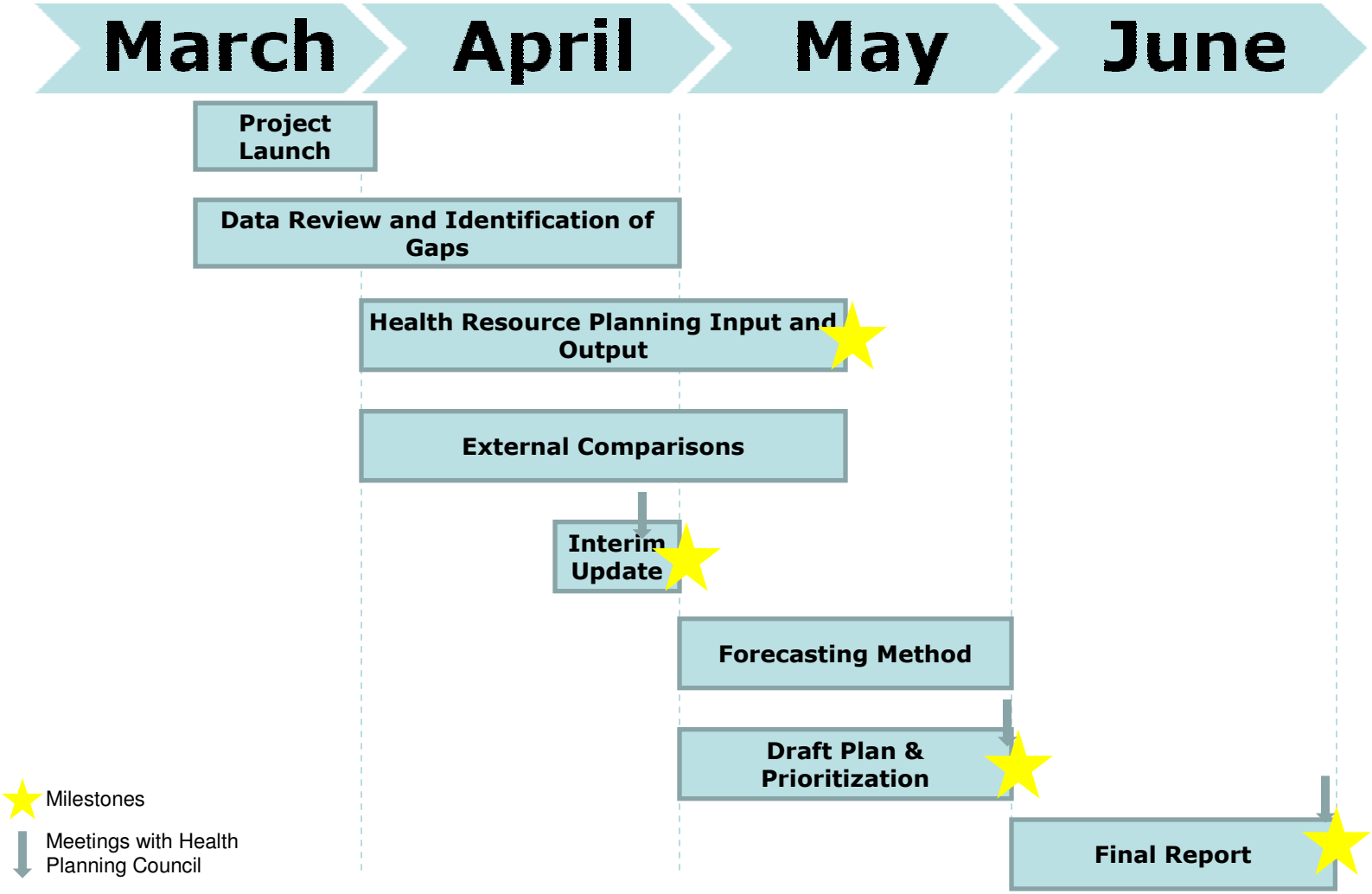
EOHHS Health Planning Council

Meeting #3
June 27, 2013

Agenda

- Timeline Review:
  - Analytic Plan and the State Health Plan
- Health Resource Planning Year 1 (Defining Scope and Expectations for Health Resource Planning in 2013)
  - Scope of Statute
  - Levels of Analysis
  - Review of Data Sources
  - Defining Scope
  - Outline for 2013 State Health Plan and Expected Output for:
    - Level 1
    - Level 2
    - Level 3
- Health Planning Next Steps

Schedule for Development of Project and Analytic Plan



The Analytic Plan Reflects Enhanced Understanding of Health Planning Challenges

April

- Developed overall project plan and approach
- Delineated scope of services in statute and began to discuss how to define scope for Year 1
- Completed review of other states' health plans
- Began to solicit input from Council on priorities
- Explored geo areas for analysis

May

- Developed and proposed frame work for 3 levels of analysis to manage scope and prioritize planning resources
- Solicited Council input on priority areas for most resource intensive planning
- Developed and delivered first draft of Analytic Plan

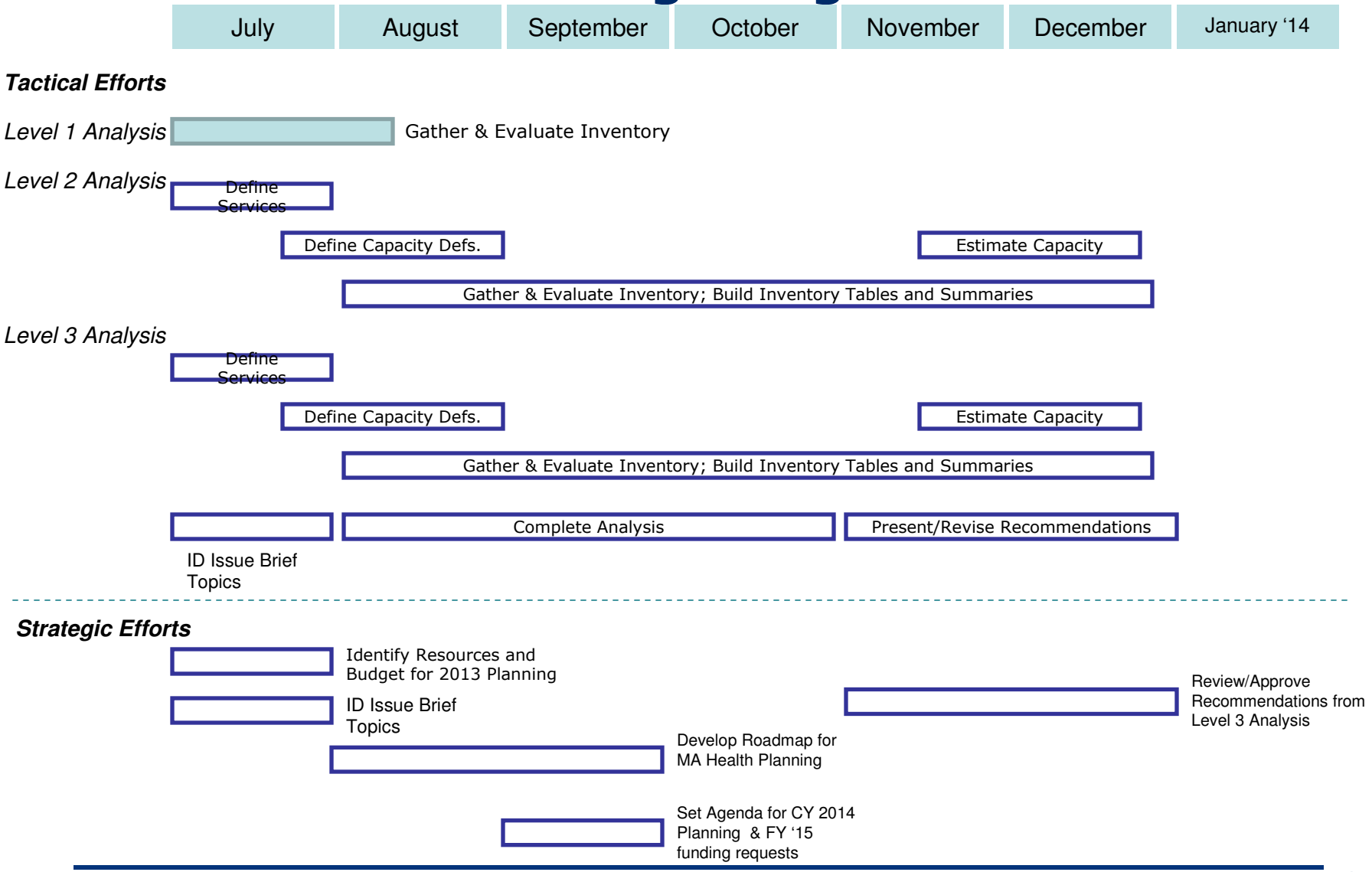
June

- Refined levels of analysis
- Clarified output of State Health Plan
- Developed structure for Level 3 analyses
- Developed and delivered revised Analytic Plan

✓Phased approach to the Health Resource Planning
✓Framework creates 3 levels of analysis
✓Clear scope of work for each level of analysis

Health Resource Planning in 2013

2013 Health Planning – High Level Schedule



***Note: Assumes regular meeting with Advisory Committee; & 5 Public Meetings (per the statute)**

Recommended State Health Plan Year 1

Level of Analysis	Planning Activities	Planning Output
Level 1	• Create table with links to best known inventory • Describe data and constraints	• Easily accessible table with links to inventory (supply) data • Table includes description and data limitations

Level 2	• Define health services
	• Obtain best available data and describe data and constraints
	• If data are available/adequate:
	  ◦ Create inventory
	  ◦ Define method for estimating capacity
	  ◦ Calculate estimate for capacity
	• If data are not available, evaluate options for new data collection, data collection
		• Definitions adopted by the Council for each service
		• When inventory data are available
		  ◦ Easily accessible data sets including inventory
		  ◦ Documented methods for calculating capacity
		  ◦ Estimate of capacity
		• When inventory data are not available
		  ◦ Description of data limitations
		  ◦ Recommended methods to collect better data for inventory and capacity
		  ◦ Primary data collection to improve data

Level 3	• Define health services
	• Data evaluation
	  ◦ In depth review of data
	• If data are available
	  ◦ Creation of inventory
	  ◦ Define method for estimating capacity
	  ◦ Calculate estimate of capacity
	• If data are not available, evaluate options for new data collection, and undertake data collection
	• Issue brief: Define the critical questions that the state health plan seeks to answer in key priority areas, analyze data; provide qualitative and quantitative conclusions as is possible with *current data*
		• Definitions adopted by the Council for each service
		• List of data sources, with a brief qualitative summary of data, including a synopsis of data quality
		• “Best source(s)” identified
		• Primary data collection to improve data
		• Easily accessible data sets including inventory
		• Documented methods for calculating capacity
		• Estimate of capacity
		• Issue brief

Infrastructure Development	Plan for full implementation of health plan over four upcoming years and ongoing repetition. Include infrastructure development, data warehousing, analytics, staffing, anticipated funding needs and meeting schedules.	

Year 1 Health Resource Planning: Three Levels of Analysis

Level 1	Level 2	Level 3

• Obstetrics and Gynecology
• Midwifery
• "Health Screening and Early Intervention"
  • Mammography
  • Early Intervention Programs
• Optometry
• Chiropractic
• Pharmacy and Pharmacological Services
• Radiation oncology: linear accelerators, stereostatic radiosurgery, proton beam therapy
• Lithotripsy
• Positron emission tomography
• Pulmonary (vent beds in long term acute care hospitals)
• Open Heart Surgery and left ventricular assist device
• Organ Transplant Programs
• Extracorporeal membrane oxygenation
• Robotics
	• Dental
	• Dialysis units
	• "Emergency Services"
	• "Acute Care Units"
	  • Medical/Surgical beds
	  • Pediatric inpatient beds
	  • "Surgical" - Outpatient and Inpatient Operating Room
	  • Labor & Delivery
	  • "Post Obstetrical Care"
	  • "ICU" (Adult)
	• Specialty Care Units
	  • Coronary Care Units
	  • Burn
	  • "Neonatal Care"
	  • "ICU" (Pediatric)
	• Magnetic resonance imaging (MRI)
	• Nuclear Medicine Scanners
	• CT Scanners
		• "Behavioral and Mental Health Services", includes Mental Health and "Substance Abuse Treatment and Services"
		  • Providers, sites of care
		  • Inpatient, outpatient & residential behavioral health & substance abuse
		• "Primary Care Resources"
		  • Practitioners
		  • Federally Qualified Health Centers
		• Post Acute Care
		  • Skilled nursing
		  • Inpatient rehab units
		  • Long term acute care
		  • Home health care
		  • Hospice
		  • Long term care and community alternatives to long term care
		  • Assisted living
		  • Long Term Care
		• Ambulatory Surgery
		• Percutaneous coronary intervention
		• Trauma
		  • Air ambulance

VII Outline – State Health Plan

The state health plan that will be delivered at the end of 2013 will include the following:

- Introduction/Overview
    1) Goals of the Council and priorities for health planning for year 1
    2) Description of the framework used to develop the plan and the rationale for 3 levels of analysis
    3) Glossary of terms description
    4) General description of data constraints, processes to identify appropriate data sources and remedies
    5) Description of the process used to create the plan (i.e., the Advisory Committee and public meetings)
    6) Next steps for health planning
- Level 1 Services – Inventory only
    1) For each service under Level 1, the State Health Plan will include a 'simple' inventory
        a. Link to the data source (when available)
        b. Qualitative description of the data available (1 or 2 sentences)
- Level 2 Services – Inventory plus Estimate of Capacity
    1) For each service in this category, the best source of data will be identified, when adequate data are available, an inventory will be created. In addition, there would be an assessment (include definition) of capacity (how is capacity of this service determined? What assumptions are used (e.g., what % occupancy is expected for a 'bed'?)
    2) If data source for a service is not robust, (e.g., operating rooms) a description of the data and suggestions for remedying the problem (e.g., survey) will be described
    3) Primary data collection
- Level 3 Services – Highest priority for the Council (6 categories of services); most robust analysis (quality vs quantity)
    1) Identification and analysis of data sources – what are issues/constraints, what opportunities are there to remedy gaps – describe methods for accessing/gathering data
    2) Creation of inventory when adequate data is available
    3) Primary data collection
    4) An issues brief – why is this important to the Council and Commonwealth; what are the issues/drivers; when data is available include it, when it is not, describe the pathway to getting good data

Example - Level 1 Services – Simple Inventory and Description of Data

Service	Definition	Link to Best Available Data Source	Data Source (Steward)	Description of Data Source & Format	Variables Available	Years Available	Data Limitations
Early Intervention	Early Intervention provides family-centered services to help children who qualify to develop the skills they will need to continue to grow into happy and healthy members of the community.	http://www.mass.gov/eohhs/gov/departments/dph/programs/family-health/early-intervention/family-info/prog-reports/program-data/local-program-performance-data-july-2010-to-june-2011.html	DPH – Early Intervention Program	This is a link to an annual report (PDF) detailing the performance all early intervention programs in the state. It include the name and address of all programs as well as key performance indicators and services provided	• Name • Address • Towns served • # of Children served • Link to program web site	Current report – July 2010-June 2011	The data is in a report format that is not easily accessible for quantitative analysis

Note: Illustrative only - all data/conclusions/facts/figures are illustrative, and not actual

Level 2 & 3 Analyses – Starts with Defining the Service and Creating the Inventory: OR example

- **Define Health Service**
  - The Planner will define what is included in an Operating Room count
    - For example, whether to include c-section rooms, open heart rooms, trauma rooms, cystoscopy rooms, endoscopy rooms, un-used rooms, procedure rooms in physician offices, etc.
  - The Planner will work to define what is an inpatient operating room, an outpatient operating room, and a mixed operating room

- **Obtain best data available and describe data constraints**
  - E.g.: "There is no current reliable inventory for Operating Rooms in the Commonwealth. The DoN office could attempt to organize a list of DoN approvals, but this will not be reliable. The MHA attempted a study of ASC OR's several years ago, but it was not successful."

- **If data are available/adequate:**
  - Create inventory; Define method for estimating capacity; Calculate estimate for capacity

- **If data are not available/adequate, define method to remedy data, data collection**
  - Step 1: Develop service definition.
  - Step 2: Determine if survey tool will also ask questions about workload, operating parameters (such as typical case lengths, hours of operation, etc.), and whether a single survey about multiple services (ED, OR, beds, etc.) will be developed– or individual surveys for individual departments
  - Step 3: Develop survey tool, with clear definitions, to distribute to providers
  - Step 4: Identify ALL potential providers of surgical services—based on definitions of surgical services
  - Step 5: Identify point of contact at each site who can be responsible for completing the survey of inventory
  - Step 6: Review survey tool with sample point of contacts to review for clarity, ease of completion, reliability
    Step 7: Distribute survey tool to points of contact
  - Step 8: Keep track of responses, develop correspondence to "non-responders."
  - Step 9: Review results; answer questions; develop clarifying correspondence and survey tools as needed
  - Step 10: Compile results
  - Step 11: Add survey tool to routine data gathering methods—such as including as part of the licensing renewal

Example - Level 2 & 3 Services – Service Definition, Recommended Method to Estimate Capacity (example)

Service	Recommended Measure	Definition	Suggested Data Source and Steward	Description of Data Source (See data evaluation table for more details)	Example Method to Calculate Capacity
Community Health Centers	- # of Community Health Centers/ Population	Community Health Centers provide primary, preventative and dental care as well as mental health, substance abuse and other community-based services… Source: http://www.mass.gov	**Steward:** Massachusetts League of Community Health Services **Source:** http://www.massleague.org/findahealthcenter/index.php	Data source contains a list of Health Centers with address and phone number. The types of services provided are included. Data is updated annually	Capacity of individual provider types, based on productivity benchmarks; number of exam rooms and visits per exam room
School based Health Centers	- # of School-based Health Centers/ Population	The School-Based Health Center Program, administered by the MA DPH since 1989 has become an integral part of the healthcare delivery system for children in Massachusetts…. Source: http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/school-based-health-centers/	**Steward:** School-based Health Center Program of MA DPH **Source:** http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/school-based-health-centers/directory-of-school-based-health-centers.html	Data source contains a list of schools with address and is organized by region and sponsoring agency. Data is updated annually	Capacity of individual provider types, based on productivity benchmarks; number of exam rooms and visits per exam room

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Example - Level 2 & 3 Services – Data Evaluation Table

Name of Database	Description	Data Base Source (data Steward)	Link	Cost	Data Fields	Strengths	Weaknesses	Recommend New Data Collection	Recommend Ongoing Infrastructure	Format	Date of File/ Time of Output
BORIM License Database	Roster of currently licensed MA physicians	MA Board of Registration in Medicine	http://www.mass.gov/eohhs/gov/departments/borim/	$65	Name, DOB,practice address, phone, license #, license status, license class, original license date, renewal date, medical school, graduation date, degree, NPI, specialties, board certifications, work setting, hospital affiliations	Frequently updated, official record, contains both self-declared and verified information, contains fields useful for complex analytics (e.g., hospital affiliation, length of licensure in MA)	No information on FTE practice (capacity), affiliated practitioners, self-declared information may be incorrect		e.g. promulgate regulations for new, ongoing data collection	csv file	1/ 2013; Current list of providers licensed as of 12/2012

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Example - Level 2 & 3 Services – Example Inventory Table

Geographic Area	Facility Name	Address	# of Beds
Secondary Geographic Area – Metro Boston Turnpike Corridor	Hospital 1	A	100
	Hospital 2	B	50
	Hospital 3	C	115
Subtotal Geographic Area - Metro Boston Turnpike Corridor	3 hospitals		Total beds = 265
Secondary Geographic Area – NE North 495 Market	Hospital 4	D	10
	Hospital 5	E	8
	Hospital 6	F	30
Subtotal Geographic Area - NE North 495 Market	3 hospitals		Total beds = 48

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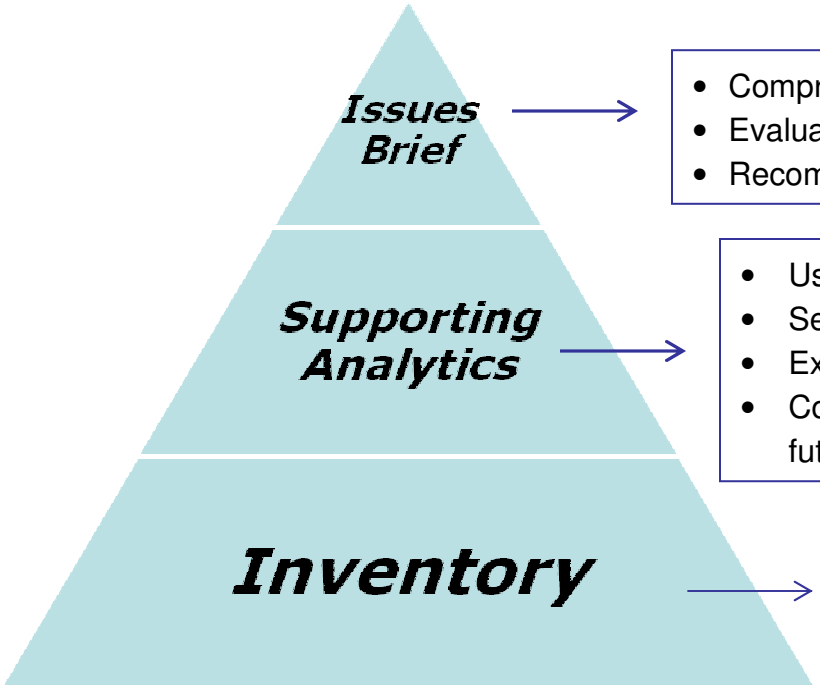
Level 3 Analysis – Built on a Foundation of Data and Analytics

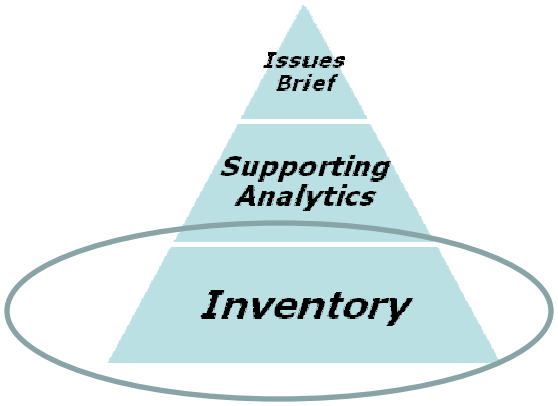


- Comprehensive review of issues
- Evaluation of policy implications
- Recommendations

- Use inventory and other data sources
- Set context for health planning
- Explore current supply and demand
- Consider anticipated trends to identify future gaps

- Consistently defined measures
- Reliable and complete data
- Readily available, detailed lists of providers and facilities organized by geographic service markets

Issues Brief Contents



Detailed Data and Data Evaluation

Definitions

- Definitions of the services
- Planning areas for the services

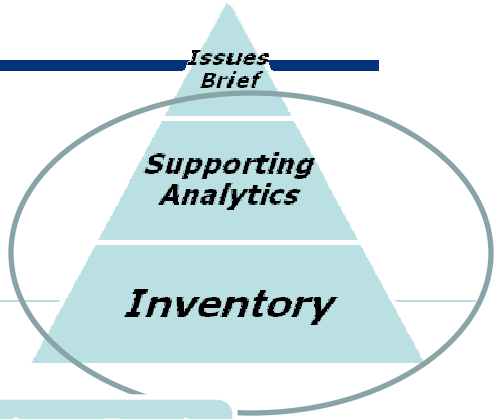
Data Source Evaluation

- For Inventory and workload data:
  - Sources, Data Elements Included, Age of the Data, Limitations of Data, Suggestions for Improvement
- Capacity Methodology

Inventory Tables

- Tables of inventory, sorted & subtotaled by market area
- General description of the inventory source
- Other supporting tables

Issues Brief Contents



Supporting Analytics

General Context that Support the Issues

- Demographics
- Existing Health System Overview
- Health Status of the Population

"Resource Plan" by Service Market

- Descriptions of supply, capacity, workload, utilization etc. by Geo area
- Findings, recommendations

Healthcare Trends Impacting the Issues

- Summary of future trends in utilization, technology, operations that might affect the resource plan

Detailed Data and Data Evaluation

Definitions

- Definitions of the services
- Planning areas for the services

Data Source Evaluation

- For Inventory and workload data:
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- Capacity Methodology

Inventory Tables

- Tables of inventory, sorted & subtotaled by market area
- General description of the inventory source
- Other supporting tables

Issues Brief Contents

Issues Brief

- Issues of importance in the service and why
- Findings, conclusions, recommendations referencing analytics described below

Supporting Analytics

General Context that Support the Issues

- Demographics
- Existing Health System Overview
- Health Status of the Population

"Resource Plan" by Service Market

- Descriptions of supply, capacity, workload, utilization etc. by Market
- Findings, recommendations

Healthcare Evolutions in the Issues

- Summary of future trends in utilization, technology, operations that might affect the resource plan

Detailed Data and Data Evaluation

Definitions

- Definitions of the services
- Planning areas for the services

Data Source Evaluation

- For Inventory and workload data:
  - Sources, Data Elements Included, Age of the Data, Limitations of Data, Suggestions for Improvement
- Capacity Methodology

Inventory Tables

- Tables of inventory, sorted & subtotaled by market area
- General description of the inventory source
- Other supporting tables

Level 3 Analysis Table of Contents

I. Issues Brief
   a. What are the issues to be covered? Why are they important
   b. Discussion of issues, referencing analytic set described below
   c. Summary of findings
   d. Conclusions and recommendations
   e. Next steps for this issue area
      1. Describe future questions, analyses
      2. Description of how results tie into the overall strategic plan
      3. Brief description of activities in other agencies

II. Supporting analytics
   a. Healthcare Trends
      1. Summary of trends that may affect resource plan
   b. Definitions
      1. Definitions of services
      2. Description of Service Markets
   c. General information to provide context to analysis (may be used by all issue briefs)
      1. Demographics
      2. Existing Health System Overview
      3. Health Status of the Population
   d. Resource Plan
      1. Descriptions of supply, capacity, workload, utilization by Service Market
      2. Findings, recommendations

III. Data Source Evaluation Tables

IV. Inventory Tables by Service Market

Level 3 Analysis Table of Contents

I. Issues Brief
   a. What are the issues to be covered? Why are they important
   b. Discussion of issues, referencing analytic set described below
   c. Summary of findings
   d. Conclusions and recommendations

1. Issues Brief: Primary Care (Example only)

Ensuring Primary Care Assets Are Situated In Locations to Provide the Greatest Benefit to Those in Need of Their Services

Although residents of Massachusetts enjoy the highest rate of insurance coverage in the nation, some residents remain uninsured or underinsured. Further, Massachusetts is considered to have a relative abundance of primary care providers, relative to other states. Nonetheless residents might have difficulty obtaining timely and affordable access to primary care, due to their insurance status, geographic location, or other factors. A 2012 survey by the Massachusetts Medical Society found wait times for new patient appointments of 44 days for internal medicine and 45 days for family medicine, with substantial variation across the state.

The Community Health Center (CHC) program is an important safety net for those who cannot take advantage of alternative primary care resources either due to language or cultural barriers, financial constraints, or physical access barriers—such as whether the primary care resources are located on a public transportation route. From the perspective of a health planner, CHCs are also relevant because the state plays an important role in the funding of CHCs.

As an example of how a specific question in health planning can be formulated and analyzed, the Council could consider whether the Commonwealth's current CHCs are located in the areas with the potential to best serve the Commonwealth's residents and whether there is appropriate capacity and scope of services at the existing centers. This type of information might be helpful in informing a discussion about whether new centers should be developed in areas of under-supply.

II. Supporting Analytics

a. Healthcare Trends
    1. Summary of trends that may affect resource plan
b. Definitions
    1. Definitions of services
    2. Description of Geographic Area
c. General information to provide context to analysis (may be used by all issue briefs)
    1. Demographics
    2. Existing Health System Overview
    3. Health Status of the Population
d. Resource Plan
    1. Descriptions of supply, capacity, workload, utilization by geographic area
    2. Findings, recommendations

a. Healthcare Trends

- Provider satisfaction and impact on provider supply
- Changes to supply of mid-level providers
  - Expanding scope of practice
- Impact of reimbursement
  - Changes in reimbursement methodologies
- Role of technology, such as EHR and telemedicine
- State and federal health reform
  - Payment and delivery system reform
  - Cost containment
- Efforts to integrate behavioral health and primary care
- Impact of GME Policies and Funding

a. Healthcare Trends*

- Several example impacts of health reform trends on supply and demand:
- The Alternative Quality Contract (AQC) was associated with savings in outpatient procedures, imaging and tests (Song et al)
- Introduction of PCMH associated with increased use of non-physician providers such as NPs, PAs, medical assistants, and smaller panel sizes (Reid et al)

*Song Z, Safran DG, Landon BE, Landrum MB, He Y, Mechanic RE, et al. The Alternative Quality Contract, Based On A Global Budget, Lowered Medical Spending And Improved Quality. Health Affairs. 2012;31(8):1885-94.

Reid RJ, Coleman K, Johnson EA, Fishman PA, Hsu C, Soman MP, et al. The group health medical home at year two: cost savings, higher patient satisfaction, and less burnout for providers. Health Affairs. 2010;29(5):835.

b-1. Definitions of service components

Providers	Facilities
Physicians (Internal Medicine, Family Practice, Pediatrics, Geriatrics; excluding OB)	Hospital Based Primary Care, Clinics, Physician offices, Urgent Care facilities, including Limited Services Clinics*
Primary Care Nurse Practitioners (Internal Medicine, Family Practice, Pediatrics; excluding OB)	DPH licensed Community Health Centers, DPH licensed School Based Clinics
Primary Care Physician Assistants (Internal Medicine, Family Practice, Pediatrics; excluding OB)	DPH Licensed Adult Day Health Centers, and DPH Licensed Family Planning Centers

*** Limited Service Clinics do not deliver primary care but have a complementary role in the system**

NOTE: Other sites of service will be added as determined by the Council

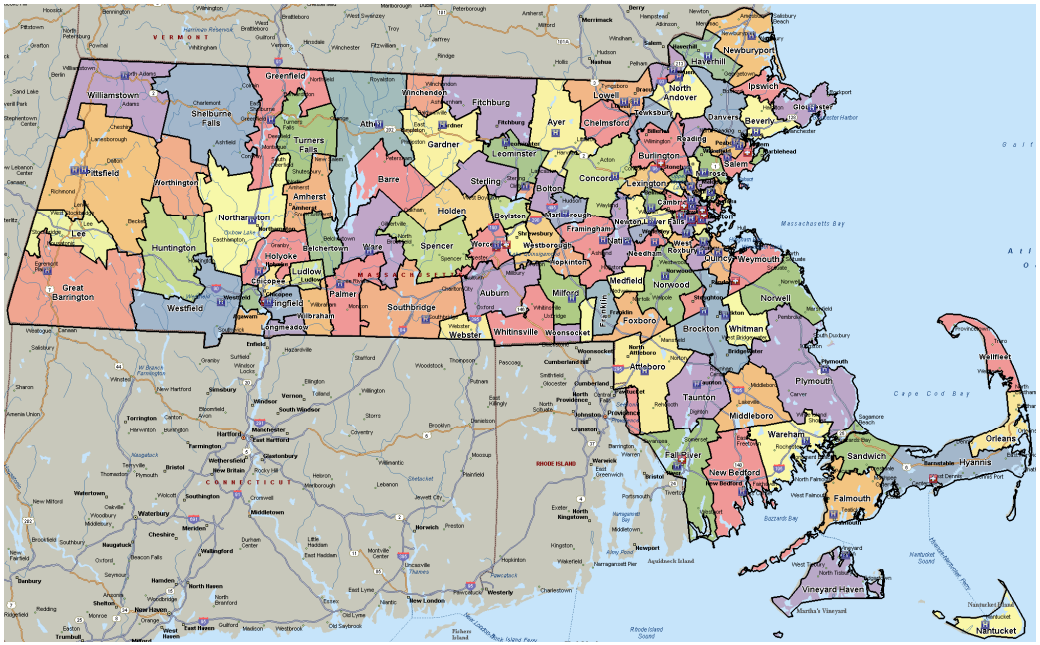
b-1. Definitions of Primary Care Providers*

Resource	Definition
Primary Care Physician	When using the Board of Registration in Medicine data: Physicians listing primary specialty in: Family Medicine, Internal Medicine, Pediatrics, General Practice, Geriatrics, Gerontology, Medical/Pediatrics, Preventive medicine and Secondary Specialty in: [NULL], Acupuncture, Adolescent Medicine, Family Medicine, Family Medicine/Preventative, General Practice, General Preventative Medicine, Geriatric Medicine, Geriatrics, Internal Medicine, Pediatrics, Preventive Medicine, Public Health & General Preventative Medicine. Excludes OB/Gyn Physicians must be practicing in an outpatient setting.
Internal Medicine	"An internal medicine physician completed training in … For purposes of the plan the provide must be actively practicing in an outpatient setting. Use the "clinical FTE" percent."
Family Practice	
Pediatrician	
Nurse Practitioners	
Physician Assistants	

***Note: Illustration – much of the effort in level 2 & 3 is developing agreed upon definitions, use existing definitions within the Commonwealth and its agencies when possible**

b-2. Geographic Area Definitions*

Population & Planning Geographic Areas: The health resource plan uses a standard definition of geographic areas. In the Primary Care example, the 122 Primary Geographic Areas, mapped below are used throughout. A detailed table mapping zip codes to geographic area is included as an appendix to the Analytic Plan

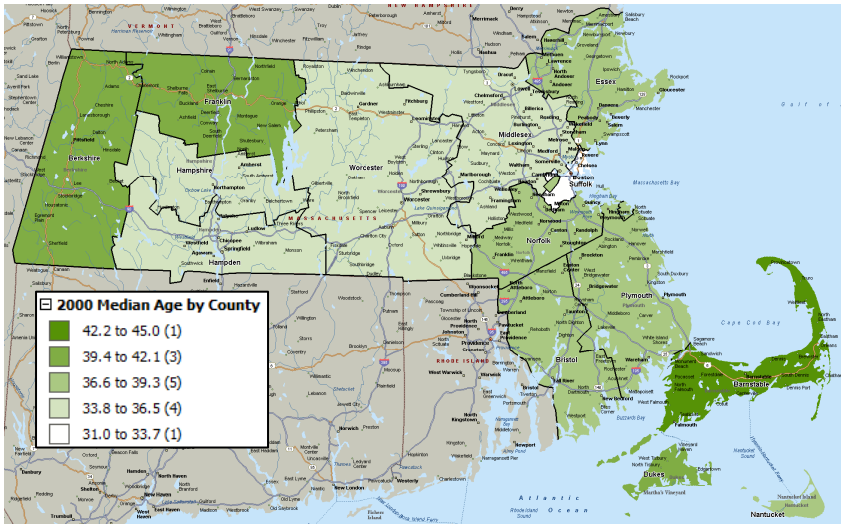


* In development- **to be further discussed with Council**

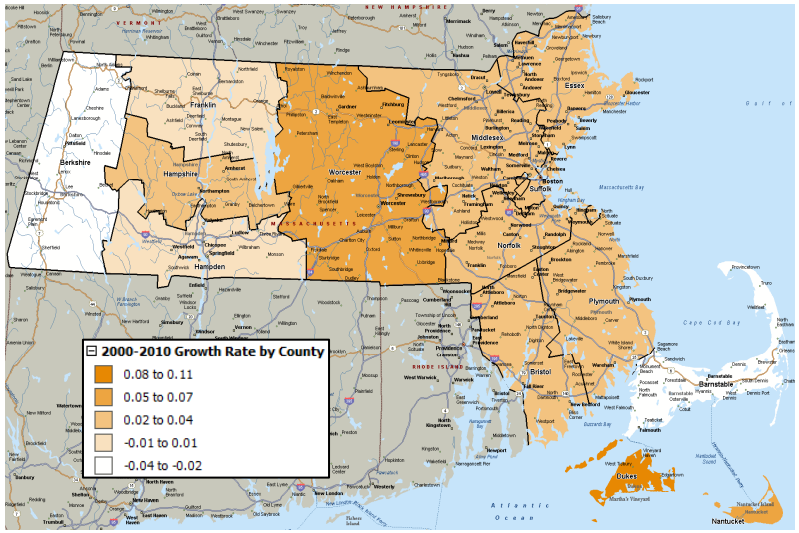
c-1. Demographics

- In these maps, population is measured at the county level, in the Level 3 Issue Briefs, population would be mapped consistently with the provider and service data.

Map of median age by county in Massachusetts



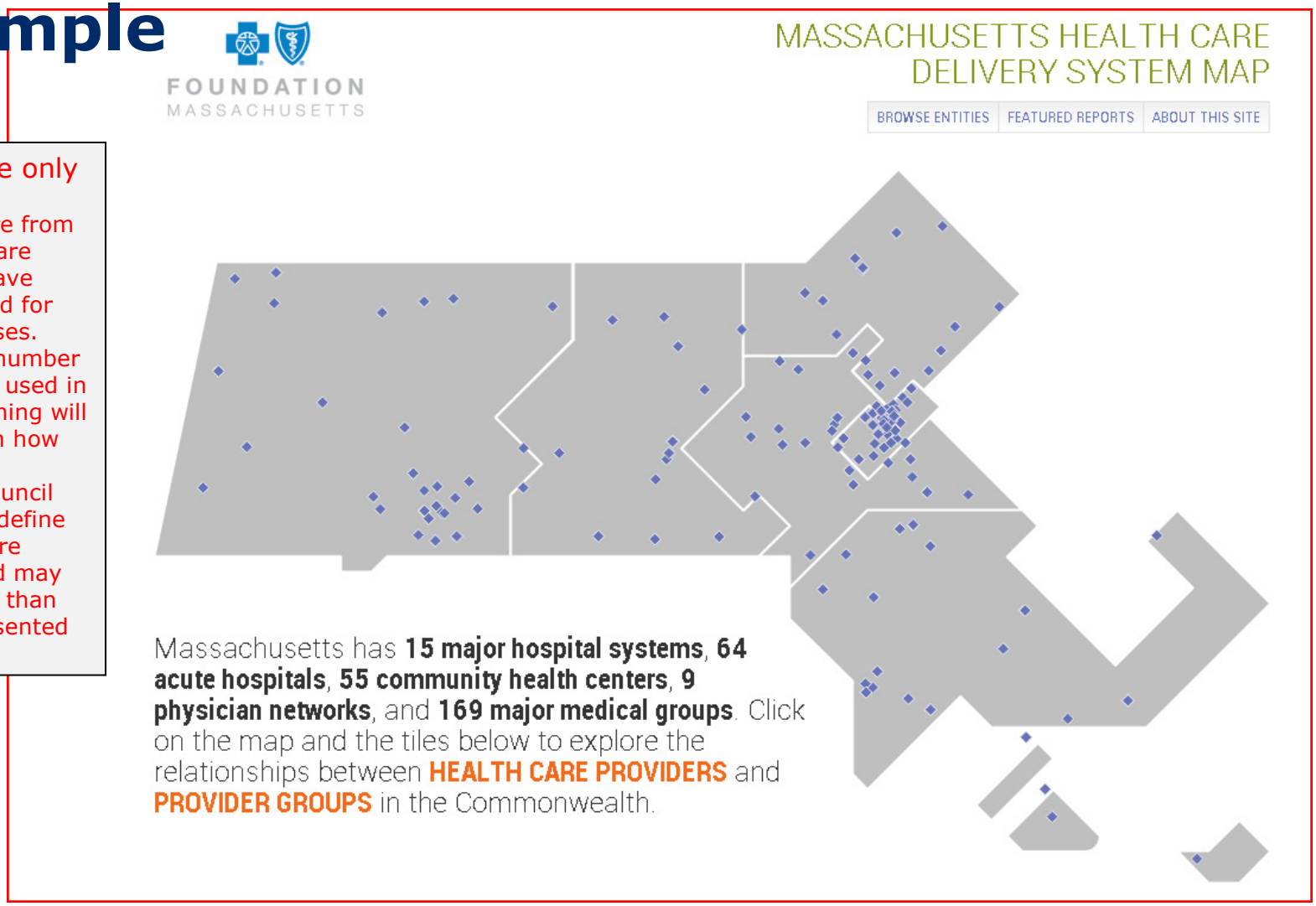
Map of population growth by county 2000-2010



c-2. Existing Health System Overview Example

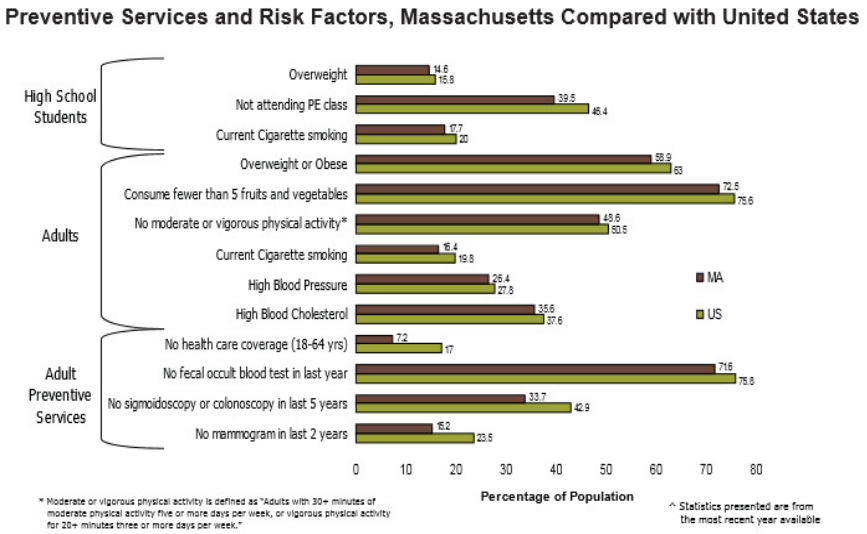
Illustrative only

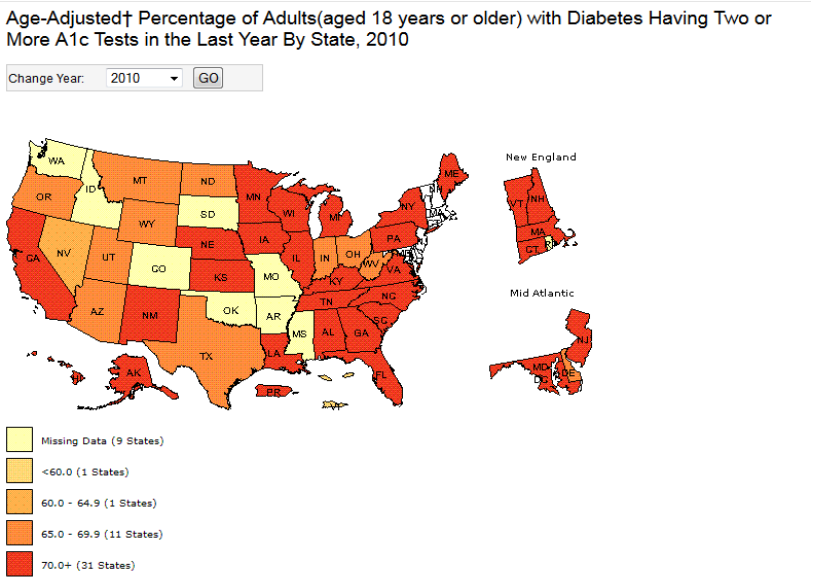
Numbers are from BCBS, and are used and have been defined for their purposes. The actual number of hospitals used in health planning will be based on how the Health Planning Council chooses to define an acute care hospital and may be different than what is presented here.



c-3. Health Status of the Population

- Population Health Status is also frequently used in Health Planning as it may reflect/result in unmet needs





d-2. PCP Analysis

- Examined licensed PCPs per 100,000 population for Primary Geographic Areas (PGAs)
- Defined PCP as having self-declared primary specialty in primary care (family medicine, general practice, general preventive, geriatrics, internal medicine, medicine/pediatrics, pediatrics, or preventive medicine) and a secondary specialty of no secondary specialty, acupuncture, adolescent, family medicine, general practice, general preventive, geriatrics, internal medicine, pediatrics, preventive, or public health.
- Unable to determine based on existing licensing data whether and how much identified PCPs are active in clinical practice, though other data can be used to supplement (e.g. claims data or the Area Resource File, which provides county level aggregates of several crude measures of activity levels).
- Distribution highly skewed: Downtown Boston alone has 20.6% of MA PCPs, the same amount as the 76 PGAs with the fewest PCPs.

d-2. PCP Analysis

- Stoughton, Roxbury-Mt. Bowdoin, Melrose, Haverhill, Webster, Ayer, and Mattapan are examples of PGAs with over 60% fewer PCPs per 100,000 than the MA average
  - These apparently underserved areas are generally lower income communities
- High PCP per capita areas
  - Boston has 1,121 PCPs per 100,000, a rate 9.8 times above the MA average
  - Wellesley, Brookline, Newton and Needham are examples of affluent PGAs with at least 35% more PCPs than the MA average
  - Worcester, Cambridge, Lawrence and Springfield are examples of lower income PGAs with at least 35% more PCPs than the MA average
  - All are densely populated areas, and nearly all are in Eastern MA
- The highly skewed distribution of PCPs across MA suggest inefficient deployment and potential opportunities for improved performance

d-2. CHC Distribution in relation to physician supply

- 4 types of communities
- Underserved by both PCPs and CHCs
  - Melrose, Haverhill, Ayer, Marlborough, Plymouth, Attleboro, Taunton and Whitman are examples of primary geographic areas with below average PCP supply (<50% of MA avg.) and no CHCs
  - These areas are likely to be genuinely underserved for primary care
- Few PCPs, but presence of CHCs
  - Roxbury-Mt. Bowdoin, Lowell, Malden, Chicopee and Fitchburg are examples of areas with below average PCP supply (<50% of MA avg.) but have CHCs, usually well above MA average.
  - These areas may be genuinely underserved by PCPs, and the presence of CHCs may be effective in mitigating the shortage
- [Methodology note: considered only the 50 PGAs with >50,000 population]

d-2. CHC Distribution in relation to physician supply

- Large PCP supply without CHCs
  - Newton and Brookline are examples of areas with above average PCP supply (>140% of MA avg.) and no CHCs
  - These areas appear to be affluent, well-served with PCPs and without the need for CHCs
- Large PCP supply, and presence of CHCs
  - Downtown Boston, Worcester, Cambridge and Springfield are examples of areas with above average PCP supply (>140% of MA avg.) and have CHCs above the state average
  - These areas appear to have more than adequate supply of both PCPs and CHCs, which suggests some combination of unusually large health needs of the population and inefficient deployment of existing primary care resources

III. Data Source Evaluation Tables

Example: Source of Physician Data

Name of Database	Description	Data Base Source (data Steward)	Link	Cost	Data Fields	Strengths	Weaknesses	Recommend New Data Collection	Recommend Ongoing Infrastructure	Format	Date of File/ Time of Output
BORIM License Database	Roster of currently licensed MA physicians	MA Board of Registration in Medicine	http://www.mass.gov/eohhs/gov/departments/borim/	$65	Name, DOB,practice address, phone, license #, license status, license class, original license date, renewal date, medical school, graduation date, degree, NPI, specialties, board certifications, work setting, hospital affiliations	Frequently updated, official record, contains both self-declared and verified information, contains fields useful for complex analytics (e.g., hospital affiliation, length of licensure in MA)	No information on FTE practice (capacity), affiliated practitioners, self-declared information may be incorrect		e.g. promulgate regulations for new, ongoing data collection	csv file	1/ 2013; Current list of providers licensed as of 12/2012

Note: Illustrative only - all data/conclusions/facts/figures are illustrative, and not actual

IV. Example Inventory by Geographic Area

Health Center	Address	Phone	Services*	Primary Geographic Area
Desmond Callan Community Health Center	450 West River Street Orange, MA 01364	(978) 544-7800	P,D	Athol
				Subtotal Athol: 1
Joseph M. Smith Community Health Center - Allst	287 Western Avenue Allston, MA 02134	(617) 783-0500	P,D	Brighton
Vision Center at Joseph M. Smith Community Hea	300 Western Avenue Allston, MA 02134	(617) 783-0500	E	Brighton
				Subtotal Brighton: 2
Brockton Neighborhood Health Center	63 Main Street Brockton, MA 02301	(508) 559-6699	P,D,E	Brockton
				Subtotal Brockton:1
CHA East Cambridge Health Center	163 Gore Street, cambridge, MA 02141	(617) 665-3000	P	Cambridge
CHA Windsor Street Health Center	119 Windsor Street, Cambridge, MA 02139	(617) 665-3600	P,D	Cambridge
CHA Cambridge Family Health	237 Hampshire Street Cambridge, MA 02139	(617) 575-5570	P	Cambridge
Cambridge Health Alliance Health Centers	1493 Cambridge Street Cambridge, MA 02139	(617) 665-2300		Cambridge
CHA Cambridge Family Health North	2067 Mass Avenue Cambridge, MA 02140	(617) 575-5570	P	Cambridge
CHP Lee Family Practice	11 Quarry Hill Road Lee, MA 02138	(413) 243-0536	P	Cambridge
				Subtotal Cambridge: 6
Edward M Kennedy Community Health Center	19 Tacoma Street Worcester, MA 01605	(508) 852-1805	P,D,E	Worcester
Edward M Kennedy Community Health Center - N	11 Norwich Street Worcester, MA 01608	(508) 755-1119	D	Worcester
Family Health Center	26 Queen Street Worcester, MA 01610	(508) 860-7700	P,D	Worcester
Family Health At Webster Square	645 Park Avenue Worcester, MA 01603	(508) 792-7580	P	Worcester
				Subtotal Worcester: 4
				Grand Total: 114

*P = Primary Care
D = Dental Care
E = Eye Care

Note: Illustrative only - all data/conclusions/facts/figures are illustrative, and not actual